

Storm Water Manual and Ordinance Comments and Concerns Meeting 2



October 27, 2009



CITY OF
WICHITA

Storm Water Ordinance Basics

- **Development** means undisturbed property where improvements are planned or intended that will result in impervious areas either during or after construction.
- **Redevelopment** means a change to previously existing, improved property, including but not limited to the demolition or building of structures, filling, grading, paving or excavation, BUT EXCLUDES:
 - ordinary maintenance activities;
 - remodeling of buildings on the existing footprint;
 - resurfacing of paved areas; and,
 - exterior changes or improvements that do not result in an increase in impervious area.

Storm Water Ordinance Basics

Section 091 - Storm Water Quality Rules for New Developments

- Applicability:
 - Required for new developments that will have impervious cover of 22,500 ft² or more (approximately ½ acre);
 - Includes smaller sites that are part of a larger plan of sale.
- Grandfathering:
 - Exempt if platted between October 5, 2000 and July 1, 2010.
- Requirement:
 - Provide water quality treatment and downstream channel protection according to City standards.

Storm Water Ordinance Basics

Section 092 - Storm Water Quality Rules for Redevelopments

- Applicability:
 - Required for redevelopments that will create or add impervious cover of 1 acre or more;
 - Includes smaller sites that are part of a larger plan of sale.
- Grandfathering:
 - Exempt if platted between October 5, 2000 and July 1, 2010.

Storm Water Ordinance Basics

Section 092 - Storm Water Quality Rules for Redevelopments

- Required to do one of the following:
 - Reduce site impervious cover by 20%
 - Achieve 80% TSS removal from 30% of existing site and 100% of new area
 - Many BMPs to choose from (some nested, some not)
 - LID designs are encouraged and will be supported
 - Provide storm water controls elsewhere in the watershed
 - Assist the City with implementation of a water quality-related initiative or improvement elsewhere in the watershed
 - Pay a fee-in-lieu of storm water controls
 - Any combination of the above (per approval of the City)

Storm Water Ordinance Basics

Section 093 - Storm Water Quantity Rules for New Developments & Redevelopments

- Applicability:
 - Required for new developments that will have impervious cover of 1 acre or more.
 - Required for redevelopments that will create or add impervious cover of 1 acre or more.
- Requirement:
 - Provide peak discharge control for the 2, 5, 10, 25, and 100-year storm events;
 - Analyze peak discharges and channel velocities downstream and eliminate increases.

Storm Water Ordinance Basics

Section 095 - Exemptions & Waivers to Storm Water Control Requirements

- Exemptions:
 - Gardening, building or grounds maintenance and minor landscaping;
 - Utility work;
 - Septic tanks, drainfields;
 - Installation of posts or poles;
 - Farming activities;
 - Emergency work and repairs.
- Waivers:
 - Ordinance lists reasons for waivers (downstream facility, adverse impact, etc.).
 - The developer must apply for the waiver.
 - The developer must supply an engineering study.

Storm Water Ordinance Basics

Section 096H - Platting of Storm Water Facilities – Added flexibility

- Residential subdivisions:
 - Facilities must be shown on the plat and recorded as permanent easements or reserves.
- Non-residential properties:
 - If > 5 acres, facilities must be shown on the plat and recorded as permanent easements or reserves.
 - If ≤ 5 acres:
 - must demonstrate the viability of proposed facilities;
 - can provide contingent dedications of any facilities, reserves and/or easements.

Storm Water Ordinance Basics

Section 097 – Duty to Maintain Storm Water Facilities

- Owner to inspect and maintain at intervals defined in the manual.
- Owner to provide inspection report every other year.

Storm Water Ordinance Basics

Section 100B – Notice of Violations

- A NOV must be issued for each violation, except when the owner or contractor has repeatedly ignored and not made any reasonable intent to comply with City rules.

Storm Water Ordinance Basics

Section 120 – Appeals

- The City will use the existing Storm Water Utility Appeals Board.
 - Director of Water Utilities or designee
 - Director of Planning or designee
 - City Manager or designee

Concern about the Guiding Principal

Concern: The cost to implement BMPs should be considered on each development site.

Response:

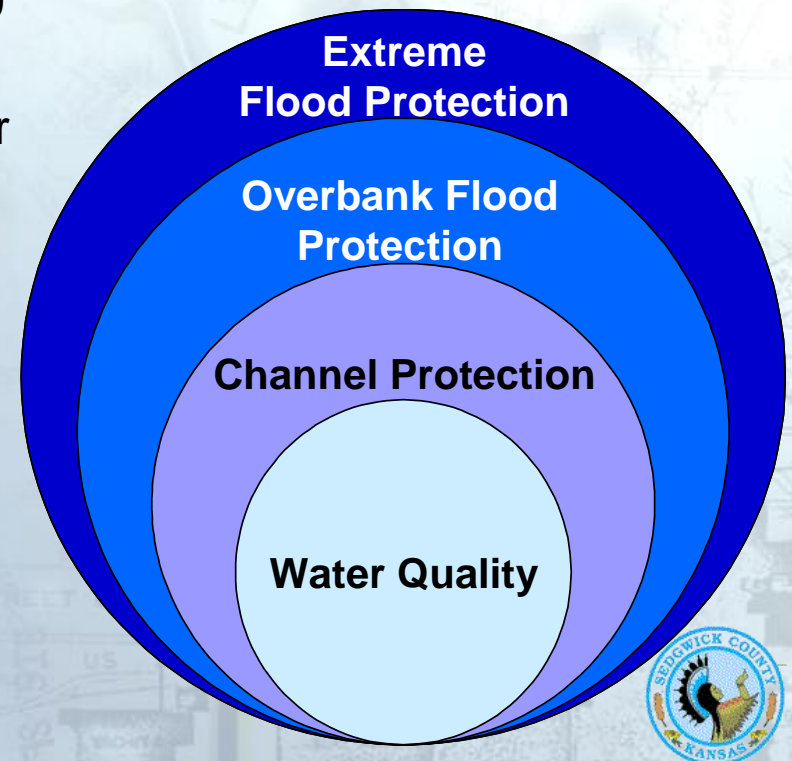
- EPA and KDHE will not consider economic feasibility for environmental compliance BMPs.
 - Allowing waivers or exemptions because of BMP cost may put the City in jeopardy with MS4 permit compliance.
- Site design approach is flexible, which can allow developers to find the lowest cost or highest margin solutions

Question about Implementation

Question: Is it feasible to adopt the ordinance and manual incrementally (i.e., quantity then quality)?

Answer:

- Not recommended
- MS4 Permit deadline was October 1, 2009
- The Integrated Site Design Approach is space and cost effective when storm water quality and quantity are considered together.
- Proposed floodplain management requirements are in a separate ordinance from the water quality requirements.



Questions about the Approach

Question: Will the new program require prime commercial development space to be removed from use?

Answer:

- It doesn't have to – not with good, smart site designs
- The new requirements do not change “use” related regulations, such as zoning rules.
- Traditional development designs are still allowed. They simply must add water quality (small volume) consideration to their quantity BMPs.
- Low Impact designs and opportunities are encouraged, providing flexibility and innovation when desired by the owner.

Questions about the Approach

Question: Do the new requirements change the way developers look at target markets?

Answer:

- We don't think it will affect target markets.
- The new requirements do not change “use” related regulations, such as zoning rules.
- Flexible Approach:
 - Traditional development designs are still allowed.
 - Low Impact designs and opportunities are encouraged.
- Other neighbor and regional communities must also implement post-construction BMPs
 - Sedgwick County
 - Newton, Park City, Derby, Kechi, Valley Center, Mulvane, El Dorado, Haysville, Winfield, Hutchinson, etc.
 - Topeka, Salina, Kansas City, Tulsa, Oklahoma City

Questions about the Approach

Question: Do the proposed ordinances & manual keep Wichita on a level playing field with other communities ?

Answer:

- Yes.
- Other neighbor and regional communities must also implement post-construction BMPs.
- The ordinance and manual provide a flexible approach in site design that other communities may not provide.

Questions about the Approach

Question: Are other smaller communities near Wichita and Sedgwick County going to have similar rules?

Answer:

- Yes.
- Other neighbor communities must also implement post-construction BMPs.
- Requirements for all MS4 permittees.
 - Develop, implement and enforce a post-construction program for new developments and redevelopments 1 acre or greater
 - Require BMPs to prevent/minimize water quality impacts
 - Include structural (constructed) and non-structural (land planning) BMPs
 - Have an ordinance to implement the program
 - Ensure long-term operation and maintenance of BMPs



Questions about the Approach

Question: Why is TSS used as a measuring stick for water quality?

Answer:

- TSS is a common and accepted measure of pollution due to siltation and sediment;
- Other pollutants (nutrients, metals) often adhere to sediment particles;
- Wichita's pollutants of concern are sediment, nutrients and metals;
- The manual includes BMPs effective in addressing sediment....
- **SO – the program targets Wichita's pollutants of concern**

MS4 Permit Requirement



Questions about the Approach

Question: Why are we using an 80% TSS removal standard?

Answer:

- Nationally considered reasonable and attainable
 - Effective for substantial pollutant removal
 - Cost-effective for developers/contractors
 - Not rocket science
- Accepted by many State regulatory agencies and promoted by EPA

Question about the Ordinance

Question: What is the definition of an effective BMP?

Answer (Erosion Control):

- A BMP that successfully keeps sediment on-site
 - No wash-off
 - No street tracking
 - Not in storm sewers
 - Not in streams/ponds

Answer (Post-Construction):

- An effective BMP is:
 - A BMP that is constructed and maintained in accordance with the approved design plan

Question about the Ordinance

Question: What is “reasonable notice”?

Sections 16.32.050 (construction site runoff), 16.32.060 (industrial activity runoff), and 16.32.100 (enforcement actions)

Answer:

- Not new - exists in the current Storm Water Pollution Prevention Ordinance
- Used by KDHE in the Kansas Construction General Permit for construction site erosion control management
- Typically refers to an amount of time after issuance of an NOV when the violator has the opportunity to take corrective action before an enforcement action occurs.
- Can vary depending upon type, severity and potential impacts of violation

EXAMPLE ISSUE

Erosion control BMPs in disrepair

Discharge of hazardous chemicals into storm drain

BMPs constructed not according to plan

REASONABLE NOTICE

Before next rainfall

Immediate

Before next permit approval



Question about the Ordinance

Question: Can box culverts can be used to enclose open channels in commercial developments?

Answer:

- Yes

Ordinance Modification:

- Open channels can be enclosed as long as design requirements are met:
 - Minimum slope
 - Downstream velocities cannot be erosive
 - The culvert is self-cleaning
 - Adequate maintenance access is provided

Concern about the Process

Comment: The manual is too complicated.

Response:

- Navigational aids for the manual are being developed.
- Training will be provided to City staff and the development community:
 - The new rules
 - How to use the manual
 - Design plan preparation and submittal
 - Design and calculation guidance
 - Example site designs

Concern about the Process

Comment: The administrative process is too complicated.

Response:

- Wichita's existing site design process HAS NOT CHANGED.
 - To support the City's compliance with its MS4 permit:
 - More detail and documentation is required on design plans
 - Approved design plans must be enforced
- Navigational aids about the design process are being developed.
- Training will be provided to City staff and the development community:
 - The new rules
 - How to use the manual
 - Design plan preparation and submittal
 - Design and calculation guidance
 - Example site designs

Other Questions Already Answered

1. Do properties that are already platted have to comply with the water quality rules?
2. When will existing plats/developments be required to incorporate BMPs?
3. What can we do to provide maximum flexibility on commercial plots and still meet the requirements and intent of policy?
4. Do we provide flexibility for redevelopments?
5. What will prevent a developer from getting multiple violations on the same day?